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| 24923 7590 01/21/2009 PAUL S MADAN MADAN, MOSSMAN & SRIRAM, PC | | | EXAMINER | |
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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte PAUL R. HART

Appeal 2008-5972 Application 10/719,567 Technology Center 1700

Decided: January 21, 2009

Before EDWARD C. KIMLIN, KAREN M. HASTINGS, and MICHAEL P. COLAIANNI, Administrative Patent Judges.

KIMLIN, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 1-4, 6, 7, and 10-18. Claim 1 is illustrative:

 A composition for removing solubilized organics from a water-like fluid phase consisting essentially of:

a hydrophilic α -hydroxymonocarboxylic acid (AHA); and an anionic polymer,

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in the absence of a cationic emulsion breaker, where the weight ratio of AHA to anionic polymer in the composition ranges from over 50:1 to 10.000 to 1.

The Examiner relies upon the following references as evidence of obviousness:

| Valint | US 4,835,234 | May 30, 1989 |
|----------|--------------|---------------|
| Augustin | US 5,045,212 | Sep. 3, 1991 |
| Bellos | US 5,853,592 | Dec. 29, 1998 |

Appellant's claimed invention is directed to a composition consisting essentially of a hydrophilic α -hydroxymonocarboxylic acid (AHA) and an anionic polymer. There is an absence of a cationic emulsion breaker in the composition, and the composition finds utility in removing solubilized organics from a water-like fluid phase.

 $Appealed \ claims \ 1\text{--}4, 6, 7, and \ 10\text{--}18 \ stand \ rejected \ under \ 35 \ U.S.C.$ § 103(a) as being unpatentable over Bellos in view of Augustin and Valint.

Appellant has not separately argued any particular claim on appeal. Accordingly, all of the appealed claims stand or fall together with claim 1.

We have thoroughly reviewed each of Appellant's arguments for patentability. However, we are in complete agreement with the Examiner's reasoned analysis and application of the prior art, as well as his cogent and thorough disposition of the arguments raised by Appellant. Accordingly, we will adopt the Examiner's reasoning as our own in sustaining the rejection of record, and we add the following for emphasis only.

There is no dispute that Bellos, like Appellant, discloses a composition for removing solubilized organics from a water-like fluid phase comprising a hydrophilic α-hydroxymonocarboxylic acid (AHA). As acknowledged by the Examiner, Bellos does not specifically teach the presence of an anionic polymer in the composition. However, the Examiner correctly points out that Bellos discloses the importance of adding demulsifiers when significant shear is created by the action of stirrers or agitators. The reference also teaches that the demulsifier may be added in combination with the organic acid (col. 7, ll. 17-21). Since Augustin teaches the use of an anionic polymer as a demulsifier to, like Bellos, purify an aqueous phase stream from which the oil phase has been initially separated by a cationic demulsifier, we agree with the Examiner that it would have been obvious for one with ordinary skill in the art to select an anionic polymer for the demulsifier taught by Bellos. Valint also evidences that it was known in the art to use anionic polymeric flocculants to separate oil-inwater emulsions after cationic polymers are used to break up most of the oil.

Regarding the claim recitation of an absence of a cationic emulsion breaker, the Examiner properly explains that Bellos expressly teaches that the AHA may be added separately in combination with the demulsifier (anionic polymer). Hence, we agree with the Examiner that Bellos teaches a composition consisting essentially of AHA and a demulsifier in the absence of a cationic emulsion breaker, and that Augustin and Valint evidence the obviousness of employing an anionic polymer as the demulsifier.

Also, notwithstanding Appellant's arguments to the contrary, we fully concur with the Examiner that the claim language "consisting essentially of" does not exclude an inorganic acid from the claimed composition. Appellant and the Examiner agree that the claim language "consisting essentially of" excludes ingredients that would materially affect the basic novel and

properties of the invention. But we agree with the Examiner that Appellant has not demonstrated that the addition of an inorganic acid to the claimed composition consisting essentially of AHA and an anionic polymer would materially affect the basic characteristic of the claimed composition of being able to remove solubilized organics from a water-like fluid phase. If Appellant wished to exclude mineral acids from the claimed composition, the effective claim language would be "consisting of" not "consisting essentially of."

Appellant urges that there is nothing in Bellos or the secondary references "that teaches or suggests that the mineral acid is not required in the Bellos, et al. composition or that it may be omitted to give a composition that is still effective for the stated purpose" (Principal Br. 11, first para.). Appellant's argument, however, misses the thrust of the Examiner's rejection. Although Bellos requires a mineral acid, Bellos also expressly teaches that the mineral acid may be added separately to the aqueous solution being treated after the addition of the organic acid, such as AHA (col. 5, Il. 54-59). Consequently, it is clear that Bellos teaches a composition comprising AHA and a demulsifier in the absence of an inorganic, mineral acid.

Although Appellant acknowledges that Bellos teaches the addition of corrosion inhibitors, demulsifiers, alcohol and wetting agents to the composition, Appellant contends that since Bellos teaches a "typical acid formulation" not comprising a demulsifier, Bellos "in fact teaches away from using a demulsifier in a typical formulation" (Principal Br. 12, penultimate para.). We find no merit in this argument. Manifestly, a clear teaching in Bellos of using a demulsifier in the treating composition cannot

fairly be considered as a teaching away from using the very same demulsifier. Also, Appellant has not refuted the Examiner's finding that "the formulation labeled 'typical' by Bellos at column 7, lines 3-13 only concerns an embodiment that utilizes a pre-mixed formulation employing organic acid and mineral acid together" (Ans. 13, second para.).

Appellant also maintains that "there is still no reason for one having only *ordinary* skill in the art to choose an *anionic polymer* from the extremely large universe of possibilities, based on the scant teachings of Bellos" (Principal Br. 14, first para.). However, the Examiner's rejection is not based on Bellos alone but, rather, on the combination of Bellos with Augustin and Valint.

Appellant also submits that nowhere in Augustin or Valint "is there any suggestion that anionic polymers do anything except in the *aftermath* of a prior treatment with *cationic* polymers" (Principal Br. 18, last para.). This argument, as emphasized by the Examiner, is not germane to the claimed subject matter which defines a composition, not a process for treating a water-like fluid phase. The relevant issue on appeal is the obviousness of a composition consisting essentially of an AHA and an anionic polymer in the absence of a cationic emulsion breaker.

As a final point, we note that Appellant bases no argument upon objective evidence of nonobviousness, such as unexpected results, which would serve to rebut the inference of obviousness established by the applied prior art.

In conclusion, based on the foregoing and the reasons well stated by the Examiner, the Examiner's decision rejecting the appealed claims is affirmed. Application 10/719,567

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv)(effective Sept. 13, 2004).

AFFIRMED

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